Infrastructure Canada

BRIEFING NOTE TO THE MINISTER

CANADA'S CORE PUBLIC INFRASTRUCTURE SURVEY)

(For Information)

ISSUE

- The purpose of this note is to provide an update on Canada's Core Public Infrastructure (CCPI) survey, which officially closed on November 30, 2017.

BACKGROUND

- The new survey on CCPI, developed and launched in collaboration with Statistics Canada (StatCan), will provide a picture of the current state and performance of public infrastructure across Canada. It is the first national survey regarding core public infrastructure, and provides statistical information on the stock, condition, performance, and asset management strategies of Canada's core public infrastructure assets owned or leased by [redacted] provincial, territorial and municipal levels of government.

- The data collected from the CCPI survey will provide Infrastructure Canada (INFC) and other users with much-needed baseline data on the state and performance of these asset classes, as well as on asset management practices. In addition, the survey results will fulfill some of INFC's reporting requirements, as outlined in the Investing in Canada charter, as well as other federal reporting requirements.

- The CCPI survey focuses on 9 asset classes: public transit; roads; bridges and tunnels; wastewater; potable water; storm water; sports/recreation/culture; solid waste; and social and affordable housing, plus asset management planning.

- Survey coverage for CCPI is extensive and accounts for a sample size of 2,142 respondents, which includes: all urban municipalities; [redacted] provincial, territorial and regional government organizations; a sample of rural and northern communities; and a sample of First Nations communities.

- Two versions of the CCPI survey were developed to account for variances in the respondent population. The first version was launched on July 24, 2017 for all levels of government (i.e. provincial, territorial, regional, and municipal), in addition to off-reserve Modern Treaty and Self-Governing Indigenous Communities, Métis, and Inuit. The second version of the survey targeted on-reserve First Nations communities, and was developed with input from members of the Assembly of First Nations, Chiefs from the Committee on Housing and Infrastructure, First Nations infrastructure technicians, and others. This modified, shortened version of the survey was launched the week of September 12, 2017.

- StatCan conducted survey follow-ups for non-respondents until survey closure. Key respondents, such as large municipalities, that have not provided input, will be contacted again in the coming weeks for a final effort to collect information. First Nations respondent follow-ups were done following established StatCan protocols and by using StatCan's Aboriginal Liaison Advisors.

- Work towards final data collection, verification, analysis and dissemination will be done in collaboration by INFC and StatCan. Subject matter expertise from other federal departments such as the Canada Mortgage and Housing Corporation, Environment and Climate Change Canada, Transport Canada, will be sought as part of the data validation process. These major milestones remain ongoing until final dissemination of an infrastructure report, which is expected by [redacted]

- INFC is also working with StatCan to leverage their existing Capital Expenditure and Repair (CAPEX) survey in order to provide INFC with information on the annual level of capital expenditures by order of government and by asset class. INFC has requested that additional content be added to the existing CAPEX survey to monitor federal infrastructure investment levels and measure incremental infrastructure spending. The ongoing work of both the CCPI and CAPEX surveys will provide a baseline set of infrastructure data required for INFC's reporting on results to Canadians.

CONSIDERATIONS

- The current receipt rate for the surveys is 77 percent for the main survey, and 10 percent for the First Nations on-reserve survey. The receipt rate represents the share of total mailed out questionnaires that have since been returned to StatCan, but have not yet been assessed for completeness of response. These receipt rates should not therefore be taken as response rates. Once the questionnaires have been fully processed, StatCan will provide an official response rate for the survey. The response rate is anticipated in January 2018, after the surveys have been processed.

- To date, responses have been received for all but 8 of the top 50 municipalities, and all but 39 of the top 200 municipalities. However, several of these municipalities have negotiated extensions and plan on submitting their questionnaires soon. The data received so far covers about 80 percent of the Canadian population. For confidentiality reasons, StatCan will not be able to reveal the names of the municipalities that have or have not responded.

- Based on the current low receipt rates for the First Nations on-reserve survey, there is a possibility that any survey data will be deemed by StatCan as too insignificant to publish. We are working with StatCan to determine the possible next steps, should there be no further increase in response rate.

- Further engagement with the Assembly of First Nations, as well as First Nations Technicians and Chiefs, will remain ongoing to ensure a collaborative relationship during dissemination, as well as for future iterations of the survey.

- StatCan has conducted non-response follow-ups for all outstanding municipalities. This process has included calling all non-respondents an average of nine times. Further follow-up has also included sending reminder postcards, and covering letters prompting non-respondents about the survey. Final follow-up with this group will occur in the next weeks.

- Once preliminary results are available, INFC will need to review the micro-data for quality and verification purposes. Such micro-data includes detailed information at the respondent level, such as, "the condition of water treatment facilities in the city of Toronto" or "the percentage of individuals who live within 1,000 metres of rapid transit service". The micro-data will provide INFC detailed infrastructure responses by jurisdiction, by asset, and even by survey question. Such detail will allow for a greater understanding of the 2016 state and performance of infrastructure assets in Canada. In order to access this data, StatCan requires a Memorandum of Understanding (MOU) for data-sharing. This is a standard MOU with StatCan used for micro-data sharing purposes, and data access will consist of various surveys of interest to INFC, including CCPI. A separate briefing will be provided once the MOU is finalized, as it will require the Deputy Minister's signature. It should be emphasized that while the microdata will be accessible, the identity of the survey respondents will remain confidential.

NEXT STEPS

- Work with StatCan remains ongoing to ensure the collection, validation, verification, and analysis of survey results will be completed for the upcoming data release in [redacted] INFC should have access to the preliminary results in mid-February, as part of the validation and verification exercise.

- When the results are finalized, they will be disseminated by StatCan through the Daily, as per the requirements under the *Statistics Act.* This release will be coordinated with INFC to ensure information from this department is disseminated to the public at the same time.

- We will continue to engage INFC's Communications Branch and with our IM/IT colleagues, among others, to allow for results to be published through the government's Open Data portal and information products to be shared through the INFC website.

- We will keep you apprised of this work and we will update you when we have had a chance to review the preliminary data in February/March.

Kelly Gillis Deputy Minister Infrastructure and Communities	Date

Infrastructure Canada

BRIEFING NOTE TO THE MINISTER

OVERVIEW OF STATISTICS CANADA'S 2016 *JOURNEY TO WORK* RESULTS

(For Information)

ISSUE

- On November 29th, Statistics Canada released its final major Census 2016 instalment covering the following themes: education, labour, journey to work, language of work, mobility and migration. Of these, the census responses from the *Journey to Work* are the most relevant for INFC.

- This note therefore provides an overview of how Canadians responded to the Journey to Work questions of the 2016 Census. It details the changes to the proportion of Canadians commuting to work using public transit (i.e., bus, subway, train, commuter rail, or ferry) (see **Annex A: Journey to Work Infographic**).

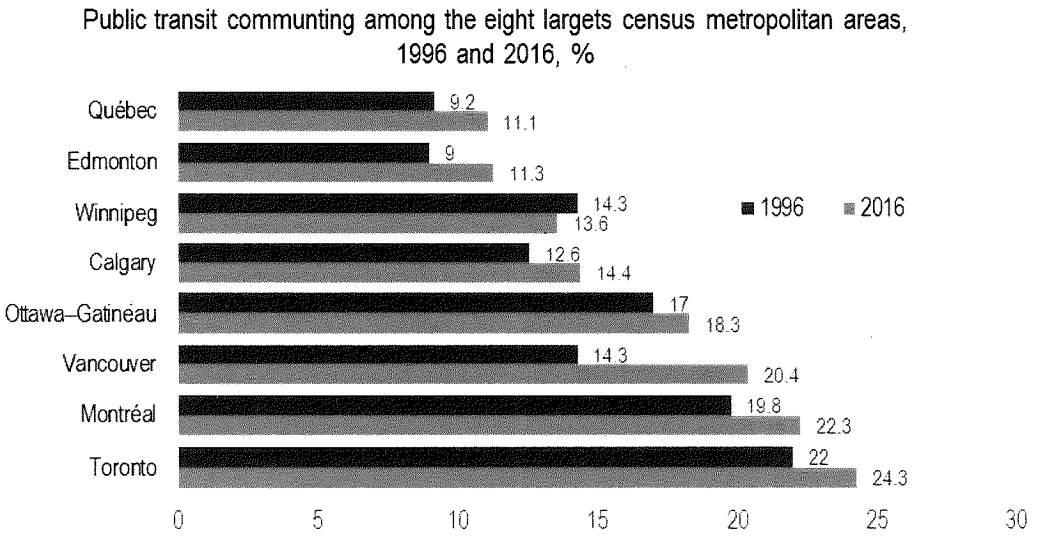
OVERVIEW – Journey to Work

1. Public Transit Use

- Statistics Canada reports the following factors as influencing the use of public transit in Canada's Census Metropolitan Areas (CMAs): population density; concentration of jobs in sectors that are well serviced by public transit; the cost of using cars compared to public transit; the availability of parking close to work; and, the quality and speed of service.

- The proportion of Canadians that reported commuting to work using public transit continues to grow. According to the 2016 Census, 12.4% of workers used public transport to get to work compared to 12.0% in 2011. In 1996, when this information was first collected in the Census, the number stood at 10.1%.

- The share of workers using public transit is more concentrated in larger cities. For instance, in all three of the largest CMAs (i.e., Montreal, Toronto, and Vancouver) the proportion of workers commuting to work using public transit is greater than 20%, with Toronto being the highest at 24.3%. This contrasts with the mid-sized and smaller CMAs where this proportion is typically below 7.0%.

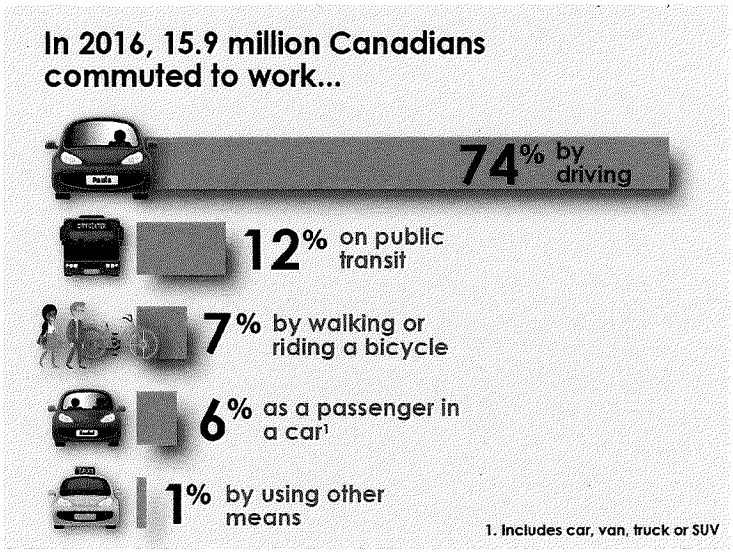


Source: Statistcis Canada: Census of Population 1996 and 2016

- Among the next largest CMAs (Québec, Ottawa–Gatineau, Winnipeg, Edmonton and Calgary), Ottawa–Gatineau had the highest proportion of workers using public transit, at 18.3% in 2016. In contrast, Edmonton had the second lowest proportion of public transit use in this group, yet recorded the largest increase since 1996 at 11.3%.

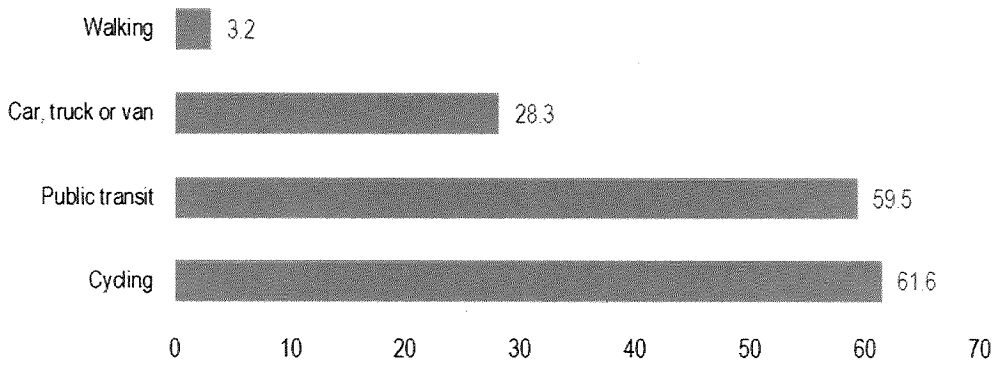
2. Modal Share

- Of the nearly 16 million Canadians commuting to work in 2016, some 80% commuted using private transportation. The remaining modes of transportation include 12% public transit; 7% active transportation (i.e. walking or using a bicycle); and 1% by other means.



- Although the majority of Canadians drive to work, the number of people getting to work using a private vehicle (i.e., car, truck or van) increased by some 28% in the last 20 years (1996 to 2016). In contrast, people getting to work using public transit increased by about 60%.

Growth in the number of commuters by main mode of commuting, Canada, 1996 to 2016



Source: Statistics Canada, Census of Population, 1996 and 2016

- Noteworthy in this Census release is the improvement in ridership that followed the expansion of the public transit service in Vancouver, which experienced the largest increase in public transit usage among the three largest CMAs over the last 20 years (1996 to 2016). This increase of 6.1 percentage points to reach 20.1% in the proportion of workers using public transit in 2016, can be traced partly to the significant investments in public transit infrastructure. Vancouver experienced two major expansions to its SkyTrain transit system in the last 20 years. The total track length tripled between 2002 and 2009 and an additional 250 buses were added to the existing fleet from 2005 to 2009. As a consequence of these major infrastructure investments, the proportion of workers in Vancouver using public transit saw the highest increase amongst all CMAs since 1996.

- The Census also reports on the use of active transportation. According to the latest results, the proportion of commuters walking to work, has declined over the last 20 years (from 7.0% in 1996 to 5.5% in 2016). However, the number of people cycling to work has risen by 61.6% since 1996, more than twice the pace of overall commuter growth of 30% or so.

- Walking or cycling to work was more common in some metropolitan areas. In Victoria, 16.9% of commuters used active transportation to get to work, the highest proportion of all CMAs. Kingston, Halifax, Vancouver, Ottawa–Gatineau and Peterborough were also among the CMAs with a proportion of active transportation higher than the national average.

3. Commute Times for workers

- The 2016 Journey to Work data also includes information on the length of Canadians' commutes. Commute times have increased by 3% (from an average of 25.4 minutes in 2011 to an average of 26.2 minutes in 2016). Commute times using public transit are consistently higher for all CMAs when compared to using private transportation. On average, it takes Canadians 44.8 minutes (an increase of 4% from 2011) to get to work using public transportation compared to 24.1 minutes when using private transportation.

- An increase in commute time for public transit does not necessarily translate into a degradation of the quality of this service. One explanation, based on the 2016 census results, could be linked to an increase in average distance from home to work since the median distance from Canadians' homes to their places of work rose by 10%.

4. The proportion of workers with no fixed address

- In addition to transit-related information, the 2016 Journey to Work data also indicates that the proportion of workers who work from home or a usual place of work (fixed address) has declined since 1996 by 0.8% and 3.3%, respectively. This indicates an increased mobility in the workforce.

- In addition, this mobility can be seen in the increased proportion of working Canadians who have no fixed work address due to the type of work they perform (e.g. construction crews, truck drivers, and independent contractors).

5. Comparisons with the United States

- In comparing this data with the United States, 5.4% of US workers commuted by public transit, which is less than half of the comparable estimate for Canada (12.4%).

- While 5.5% of commuters in Canada walked to work, the comparable US figure is 2.9%.

- The average time needed to get from home to work was not much different in Canada compared with the United States. The average commute time in Canada was 26.2 minutes in 2016, compared with 26.6 minutes in the United States.

CONSIDERATIONS

- Overall, the benefits of the use of public transit for Canadians are well-established. Some of these benefits include: reduced fuel consumption, lower household spending for transportation, less road congestion, a lower carbon footprint, local economic growth, and enhanced personal mobility. In contrast, commute times using public transportation are

double that of private transportation. Statistics such as these should be taken into consideration when any public transit decisions or policies are developed.

- Based on the Journey to Work census responses, the analysis indicates that more and better public transit infrastructure leads to higher usage rates. This phenomenon is reflected in the latest Census in two ways. First, the data shows unambiguously that cities with more developed public transit infrastructure experience higher rates of ridership among those commuting to work. Second, in the specific case of Vancouver, the data shows that investments in public transit is significantly correlated with the more intensive use of this service in recent years.

NEXT STEPS

- The department will discuss with provinces using the results from the 2016 Journey to Work as a baseline for the modal share targets that are to be incorporated into the Integrated Bilateral Agreements with provinces and territories.

- Further analysis, of the 2016 Census data, will be undertaken to better understand the trends in the modal share for both active transportation and public transit. These results will be shared once available.

- As well, the department will continue to monitor the reaction of provinces, territories and stakeholders to the 2016 Journey to Work data.

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Kelly Gillis
Deputy Minister
Infrastructure and Communities

Date

Attachments:
Annex A – Journey to Work Infographic

Journey to work

2016 CENSUS

In 2016, 15.9 million Canadians commuted to work...

- **74%** by driving
- **12%** on public transit
- **7%** by walking or riding a bicycle
- **6%** as a passenger in a car[1]
- **1%** by using other means

1. Includes car, van, truck or SUV

The average commute to work in 2016 took

26 minutes

7% of Canadians usually worked at home in 2016

How residents of Canada's CMAs[2] are commuting

	Montréal	Toronto	Vancouver
In 2016, **22%** of commuters living in the Montréal CMA commuted by **public transit** and took an average of **44 minutes** to get to work.	**24%** 50 min.	**20%** 44 min.	public transit
Car commuters living in the Montréal CMA took an average of **27 minutes** to get to work.	30 min.	27 min.	by car

	Québec	Ottawa–Gatineau	Winnipeg	Calgary	Edmonton
	11% 35 min.	**18%** 42 min.	**14%** 36 min.	**14%** 42 min.	**11%** 40 min.	public transit
	21 min.	25 min.	23 min.	24 min.	24 min.	by car

2. CMA = Census Metropolitan Area

Source: Statistics Canada, 2016 Census of Population.

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